

# **EXHIBIT K**



# As sanctions tighten, Putin focuses on Asia

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“Even the private Chinese coal traders these days don’t want to touch Russian coal, because of the fear of Western sanctions,” said Zhou Xizhou, a longtime specialist in Chinese energy who is now at S&P Global.

Despite the obstacles, global energy leaders are betting that Russia can find a way to export at least the oil and the coal, in large part because global demand remains high. The world has been short of energy since autumn, when China nearly ran out of coal and suffered widespread electricity blackouts.

Prices have risen sharply since last year for natural gas and oil as well as coal. Preventing any Russian energy from reaching world markets could drive them even higher.

“This is actually potentially a more significant energy crisis than the 1970s — that was just oil, it was simpler,” said Daniel Yergin, the energy historian and author of books like “The Prize” and “The New Map.”

Some energy industry leaders are calling for policies that do not block Russian energy exports entirely. The goal instead should be to make it very hard for Russia to export, they say, so that it does so only at very low prices.

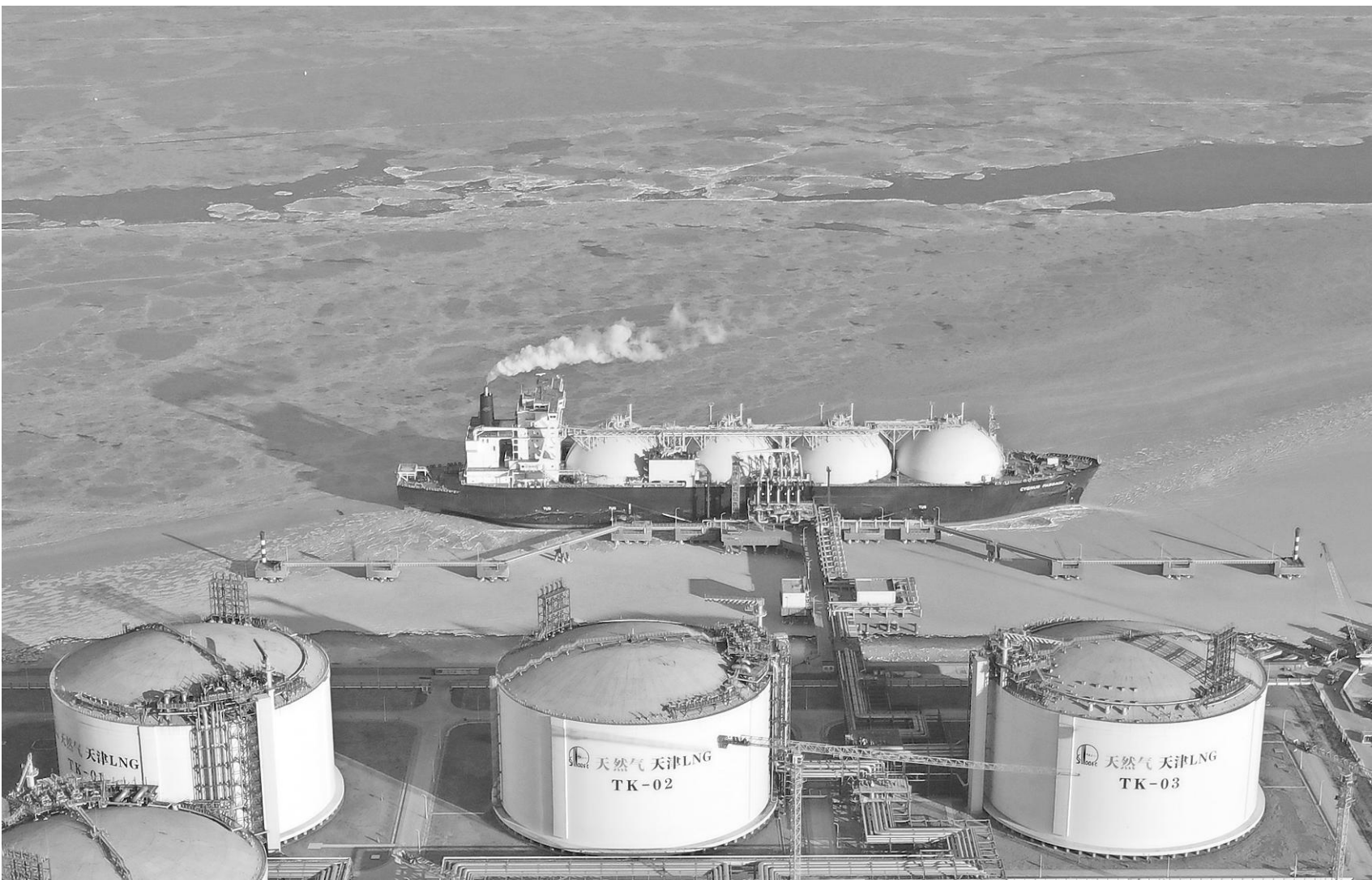
“The main issue is not to reduce or nullify Russian exports to Europe, but to reduce the Russian oil and gas revenues — they are not the same thing,” Fatih Birol, executive director of the International Energy Agency in Paris, said in a telephone interview.

The expectation is that Mr. Putin will keep the oil and coal moving by holding, in effect, the world’s biggest sale.

Russia needs every dollar of export revenue it can get right now. It is lurching toward default on its foreign debt. It has lost much of its foreign investment. And Western governments have frozen half of its central bank’s foreign reserves.

Russia currently exports nearly five million barrels per day of crude oil and another three million barrels per day of diesel, gasoline and other refined products. China and India have extensive refinery industries and are typically interested in the crude oil, Mr. Birol said.

Natural gas is harder for Russia to export. According to the International Energy Agency, Russia has the capacity to liquefy and load onto ships only about a tenth of its natural gas exports. Most of the shipments that are liquefied have already been going to East Asia anyway, with a lot leaving from the southern tip



Above, a liquefied natural gas tanker from Russia at a terminal in China. Right, coal being loaded onto a train in Russia. President Vladimir V. Putin has called for Russia to redirect exports “gradually to the rapidly growing markets of the South and the East.”

of Sakhalin Island, near Japan.

According to Marine Traffic, an Athens-based ship tracking service, the Grand Aniva switched from supplying Japan and Taiwan last year to supplying China in the two months since the Russian invasion.

The Grand Aniva is one of the few tankers still visiting Russian ports: It is owned by Sovcomflot, a state-owned Russian shipping company that is already the target of Western sanctions.

On its most recent voyage in mid-April, the Grand Aniva went from Sakhalin Island to a liquefied natural gas unloading port in Beihai, on China’s

southern coast. Sinopec, a state-owned Chinese refining giant, built the port and then transferred it three years ago to PipeChina, a separate state-owned enterprise. Sinopec, PipeChina and Sovcomflot did not respond to requests for comment.

Geopolitics help make possible the continued export of Russian energy. China has avoided condemning Russia’s invasion of Ukraine and has a history of buying oil from Iran and Venezuela despite Western sanctions on those countries.

“The Chinese have found workarounds for Iranian oil, for Venezuelan



VISUAL CHINA GROUP VIA GETTY IMAGES

ALEXANDER MANZUK/REUTERS

## Europe is on the verge of banning Russian oil. Then what?

Replacing the supply will most likely be difficult and expensive for consumers

BY STANLEY REED, MELISSA EDDY AND BENJAMIN NOVAK

Russia’s decades-long dominance of Europe’s energy market is crumbling, and the biggest blow may have just landed as the European Union moved toward a ban on Russian oil.

The European Union on Wednesday proposed a total Russian oil embargo, banning the import of crude oil in the next six months and refined oil products by the end of 2022, in its biggest and most costly step yet toward supporting Ukraine and weaning itself from its dependence on Russian fossil fuels. The ban and other measures against Russia are expected to be adopted by the end of the week.

Analysts say it will be possible to sever Europe’s oil ties to Russia, but the effort will take time and may lead to shortages and higher prices for gasoline, diesel, jet fuel and other products — a situation that could penalize consumers already struggling with inflation and, ultimately, derail the economic recovery from the pandemic.

It’s “going to be complicated,” said Richard Bronze, head of geopolitics at Energy Aspects, a research firm. “You

have got a de-linking of two very intertwined parts of the global energy system,” he said, adding, “There are going to be disruptions and costs associated with that.”

“But policymakers are increasingly convinced it is necessary and better to do that relatively rapidly, both to try and reduce revenues for funding Russia and to reduce European exposure to Russian influence,” Mr. Bronze said.

The European Union’s aims are clear. With Russia continuing to wage war in Ukraine, Europe wants to deny President Vladimir V. Putin funds from sales of oil, usually his largest export earner and a cornerstone of the Russian economy.

Russia’s oil sales to Europe are worth \$310 million a day, estimates Florian Thaler, chief executive of OilX, an energy research firm.

The move against oil would be part of an effort to end Moscow’s ability to twist European arms over energy. In its latest attempt to do so last week, Russia cut off natural gas supplies to Poland and Bulgaria. Russian oil may be an easier target than gas, analysts say. “The oil system can reconfigure itself,” said Oswald Clint, an analyst at Bernstein, a research firm, adding that oil was “a very deep, liquid and fungible market” served by thousands of tankers.

Still, for the European Union, cutting itself off from Russian oil will be a herculean task that may risk sowing division.

### \$310 million

Daily value of Russian oil sales to Europe

About 25 percent of Europe’s crude oil comes from Russia, but there are wide differences in the level of reliance among countries, with the general rule being that nations geographically closer to Russia are more entangled in its energy web.

Britain, which is not a member of the European Union and has oil production from the North Sea, has said it will phase out Russian energy; Spain, Portugal and France import relatively low amounts of oil from Russia.

On the other hand, several nations, including Hungary, Slovakia, Finland and Bulgaria, usually import more than 75 percent of their oil from Russia and might struggle to quickly replace it with alternative sources.

“It is physically impossible to operate Hungary and the Hungarian economy without crude oil from Russia,” Hungary’s foreign minister, Peter Szijarto, said on Tuesday.

While worries focus on gas pipelines, huge volumes of oil also flow from Russian oil fields through the Druzhba pipeline (named after the Russian word for friendship), whose northern branch

### 25%

Portion of Europe’s crude oil that comes from Russia

feeds Germany and Poland and southern line goes to Slovakia, the Czech Republic and Hungary.

Refineries along this route, including the PCK facility in Schwedt, near Berlin, “have been running on Russian crude for the last 50 years,” Mr. Thaler of OilX said. “You need to source a proxy for that on the international market.”

Mr. Thaler said Hungary and Slovakia could potentially receive more oil from tankers in the Adriatic Sea, via a pipeline that runs through Croatia, while the Czech Republic could be fed from a terminal in Trieste, Italy. Policymakers in Brussels may give Hungary and perhaps other countries long lead times to win their support.

Germany, on the other hand, and Poland now seem determined to end their dependence on Russian energy, and this change of heart in Germany seems to be key to European policy. Germany plans to bring oil through the eastern port of Rostock as well as from across the border in Poland, from the port of Gdansk.

The German government said it has been able to end contracts for Russian crude, with the exception of the Schwedt refinery and another in eastern Germany called Leuna, which together account for roughly 12 percent of the country’s imports from Russia.

“That means the embargo is already being implemented, step by step,” Robert Habeck, Germany’s economy minister, said on Monday.

While oil is spoken of as a single commodity, there are many types with different characteristics, and refineries are often configured to run certain grades of crude. Switching away from Russian oil may involve costs if the fuel can even be found, analysts say.

Zsolt Hernadi, the head of MOL, a large Hungarian oil company, recently said it could require up to four years and \$700 million to recalibrate his company’s refineries in the event of an embargo on Russian oil.

Analysts say an embargo could trigger a costly competition for alternative sources of oil.

Viktor Katona, an oil expert at Kpler, which tracks energy flows, said that of the substitutes potentially available for Russian oil, only Saudi output was a good fit. So far the Saudis, who will lead an OPEC Plus meeting on Thursday, have shown little inclination to increase their output more than incrementally. Mr. Katona said Iranian oil might also work, but sanctions imposed by the United States continue to crimp Iran’s fuel sales. Oil from Venezuela, which is

### 75%

Reliance on Russian oil for countries including Hungary, Slovakia, Finland and Bulgaria

also crimped by sanctions, is often mentioned as a possible swap for Russian crude.

Strains are already showing up in the market for diesel, which is used by both ordinary drivers and truckers. Diesel is in short supply because European distributors are wary of buying refined products from Russia, which once supplied large volumes of the fuel to Europe. Diesel is selling for the equivalent of about \$170 a barrel, well above the \$107-a-barrel futures price of Brent crude, the international standard, and Mr. Katona expects the price to keep going up. At the pump, diesel prices in Britain are up more than 35 percent over the last 12 months, according to the RAC, a motorists’ club.

An embargo is “going to inflict tangible pain on the European refiner and, in consequence, on the European customer,” Mr. Katona said.

Analysts say the releases of oil from

oil,” said Michal Meidan, the director of gas research and China energy at the Oxford Institute for Energy Studies. “They will find workarounds for Russian oil.”

Russia is already increasing natural gas shipments to China through a recently completed Siberian pipeline. But because Russia’s Siberian gas fields are not linked by pipelines to Russian gas fields supplying Europe, there are severe limits on Russia’s ability to shift gas sales to China.

**Geopolitics help make possible the continued export of Russian energy. China has a history of buying oil from Venezuela and Iran despite Western sanctions.**

Still, trade between Russia and China, much of it Russian energy exports, jumped nearly 30 percent in the first three months of this year compared with a year earlier.

That increase “fully demonstrates the great resilience and internal dynamism of cooperation between the two countries,” Le Yucheng, a Chinese deputy foreign minister, said in a statement last month. “No matter how the international situation changes, China will, as always, strengthen strategic coordination with Russia.”

Russia’s market position might improve in the autumn. Much of Russia’s oil is very heavy, producing extra diesel when refined. Russia exported more than 10 times as much diesel as gasoline last year, data from Russia’s Federal Customs Service shows.

The world’s main diesel market is China, with nearly twice as many heavy-duty trucks in operation as the United States. Coronavirus lockdowns have paralyzed much of China’s fleet in recent days, especially in and around Shanghai.

Diesel demand in China could completely reverse by autumn. Beijing is turning to its favorite tactic in previous economic slowdowns: enormous investment in the construction of more rail lines, roads, bridges and other infrastructure.

All of that construction will require huge fleets of diesel-guzzling trucks, excavators, pile drivers, bulldozers and other equipment.

Li Yu contributed research.



MARTIN MEISSNER/ASSOCIATED PRESS

Trucks loading up on fuel in Wesseling, Germany. Severing Europe’s oil ties to Russia may lead to shortages and higher prices.

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